RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/568,142
Source:	1FWP.
Date Processed by STIC:	2/27/06
	· / /

ENTERED



IFWP

RAW SEQUENCE LISTING DATE: 02/27/2006
PATENT APPLICATION: US/10/568,142 TIME: 14:50:27

Input Set : N:\RJAVED\10568142.txt
Output Set: N:\CRF4\02272006\J568142.raw

3 <110> APPLICANT: EXELIXIS, INC. 5 <120> TITLE OF INVENTION: SULFS AS MODIFIERS OF THE BETA CATENIN PATHWAY AND METHODS OF USE 7 <130> FILE REFERENCE: EX04-057C-PC 9 <140> CURRENT APPLICATION NUMBER: US/10/568,142 C--> 9 <141> CURRENT FILING DATE: 2006-02-10 9 <150> PRIOR APPLICATION NUMBER: US 60/495,172 10 <151> PRIOR FILING DATE: 2003-08-14 12 <160> NUMBER OF SEQ ID NOS: 11 14 <170> SOFTWARE: PatentIn version 3.2 16 <210> SEQ ID NO: 1 17 <211> LENGTH: 5699 18 <212> TYPE: DNA 19 <213 > ORGANISM: Homo sapiens 21 <400> SEOUENCE: 1 22 ggagttetea gaceteeagt tteageeetg ceeteageet eeaateegta agagaeaeee 60 24 agecceagea attggattgg geagecegte ttgacacace actgtgetga gtgettgagg 120 26 acgtgtttca acagatggtt ggggttagtg tgtgtcatca cattcgagtg gggattaaga 180 28 gaaggaaggc tgccttgctg gagctgtgtg gtcttctcca agtgagagtc gcaggcaata 240 30 gaactacttt gcttttggag gaaaaggagg aattcatttt cagcagacac aagaaaagca 300 32 gttttttttt cagggattct tcacttctct tgaacaagga actcactcag agactaacac 360 34 aaaggaagta atttcttacc tggtcattat ttagtctaca ataagttcat ccttcttcag 420 36 tgtgaccagt aaattettee catactettg aagagageat aattggaatg gagaggtggt 480 38 gctgacggcc acccaccatc atctaaagaa gataaacttg gcaaatgaca tgcaggttct 540 40 tcaaggcaga ataattgcag aaaatcttca aaggacccta tctgcagatg ttctgaatac 600 42 ctctgagaat agagattgat tattcaacca ggatacctaa ttcaagaact ccagaaatca 660 44 ggagacggag acattttgtc agttttgcaa cattggacca aatacaatga agtattcttg 720 46 ctgtgctctg gttttggctg tcctgggcac agaattgctg ggaagcctct gttcgactgt 780 48 cagateceeg aggtteagag gaeggataea geaggaaega aaaaaeatee gaeeeaaeat 840 50 tattettgtg cetacegatg atcaagatgt ggagetgggg teeetgeaag teatgaacaa 900 52 aacgagaaag attatggaac atgggggggc caccttcatc aatgcctttg tgactacacc 960 54 catgtgctgc ccgtcacggt cctccatgct caccgggaag tatgtgcaca atcacaatgt 1020 56 ctacaccaac aacgagaact gctcttcccc ctcgtggcag gccatgcatg agcctcggac 1080 58 ttttgctgta tatcttaaca acactggcta cagaacagcc ttttttggaa aatacctcaa 1140 60 tgaatataat ggcagctaca tcccccctgg gtggcgagaa tggcttggat taatcaagaa 1200 62 ttctcgcttc tataattaca ctgtttgtcg caatggcatc aaagaaaagc atggatttga 1260 64 ttatgcaaag gactacttca cagacttaat cactaacgag agcattaatt acttcaaaat 1320 66 gtctaagaga atgtatcccc ataggcccgt tatgatggtg atcagccacg ctgcgcccca 1380 68 cggccccgag gactcagccc cacagttttc taaactgtac cccaatgctt cccaacacat 1440 70 aactectagt tataactatg caccaaatat ggataaacac tggattatgc agtacacagg 1500 72 accaatgctg cccatccaca tggaatttac aaacattcta cagcgcaaaa ggctccagac 1560

75 tttgatgtca gtggatgatt ctgtggagag gctgtataac atgctcgtgg agacggggga

77 gctggagaat acttacatca tttacaccgc cgaccatggt taccatattg ggcagtttgg

79 actggtcaag gggaaatcca tgccatatga ctttgatatt cgtgtgcctt tttttattcg

1620

1680

1740

Input Set : N:\RJAVED\10568142.txt
Output Set: N:\CRF4\02272006\J568142.raw

81 tggtccaagt gtagaaccag gatcaatagt cccacagatc gttctcaaca ttgacttggc 1800 83 ccccacgatc ctggatattg ctgggctcga cacacctcct gatgtggacg gcaagtctgt 1860 85 cctcaaactt ctggacccag aaaagccagg taacaggttt cgaacaaaca agaaggccaa 1920 87 aatttggcgt gatacattcc tagtggaaag aggcaaattt ctacgtaaga aggaagaatc 1980 2040 89 cagcaagaat atccaacagt caaatcactt gcccaaatat gaacgggtca aagaactatg 2100 91 ccagcaggcc aggtaccaga cagcctgtga acaaccgggg cagaagtggc aatgcattga 2160 93 ggatacatet ggcaagette gaatteacaa gtgtaaagga cecagtgace tgeteacagt 95 ccggcagagc acgcggaacc tctacgctcg cggcttccat gacaaagaca aagagtgcag 2220 2280 97 ttgtagggag tctggttacc gtgccagcag aagccaaaga aagagtcaac ggcaattctt 99 gagaaaccag gggactccaa agtacaagcc cagatttgtc catactcggc agacacgttc 2340 101 cttgtccgtc gaatttgaag gtgaaatata tgacataaat ctggaagaag aagaagaatt 2400 103 gcaagtgttg caaccaagaa acattgctaa gcgtcatgat gaaggccaca aggggccaag 2460 2520 105 agatetecag gettecagtg gtggcaacag gggcaggatg etggcagata gcagcaacge 107 cgtgggccca cctaccactg tccgagtgac acacaagtgt tttattcttc ccaatgactc 2580 109 tatccattgt gagagagaac tgtaccaatc ggccagagcg tggaaggacc ataaggcata 2640 2700 111 cattgacaaa gagattgaag ctctgcaaga taaaattaag aatttaagag aagtgagagg 113 acatctgaag agaaggaagc ctgaggaatg tagctgcagt aaacaaagct attacaataa 2760 115 agagaaaggt gtaaaaaagc aagagaaatt aaagagccat cttcacccat tcaaqgaggc 2820 117 tgctcaggaa gtagatagca aactgcaact tttcaaggag aacaaccgta ggaggaagaa 2880 119 ggagaggaag gagaagagac ggcagaggaa gggggaagag tgcagcctgc ctggcctcac 2940 121 ttgcttcacg catgacaaca accactggca gacagccccg ttctggaacc tgggatcttt 3000 123 ctgtgcttgc acgagttcta acaataacac ctactggtgt ttgcgtacag ttaatgagac 3060 125 gcataatttt cttttctgtg agtttgctac tggctttttg gagtattttg atatgaatac 3120 127 agateettat eageteacaa atacagtgea eaeggtagaa egaggeattt tgaateaget 3180 3240 129 acacgtacaa ctaatggagc tcagaagctg tcaaqgatat aagcagtgca acccaaqacc 131 taagaatett gatgttggaa ataaagatgg aggaagetat gacetacaca gaggacagtt 3300 133 atgggatgga tgggaaggtt aatcagcccc gtctcactgc agacatcaac tggcaaggcc 3360 135 tagaggaget acacagtgtg aatgaaaaca tetatgagta cagacaaaac tacagaetta 3420 137 gtctggtgga ctggactaat tacttgaagg atttagatag agtatttgca ctgctgaaga 3480 139 gtcactatga gcaaaataaa acaaataaga ctcaaactgc tcaaagtgac gggttcttgg 3540 141 ttgtctctgc tgagcacgct gtgtcaatgg agatggcctc tgctgactca gatgaagacc 3600 143 caaggcataa ggttgggaaa acacctcatt tgaccttgcc agctgacctt caaaccctgc 3660 145 atttgaaccg accaacatta agtccagaga gtaaacttga atggaataac gacattccag 3720 147 aagttaatca tttgaattct gaacactgga gaaaaaccga aaaatggacg gggcatgaag 3780 149 agactaatca tctggaaacc gatttcagtg gcgatggcat gacagagcta gagctcgggc 3840 151 ccagccccag gctgcagccc attcgcaggc acccgaaaga acttccccag tatggtggtc 3900 153 ctggaaagga catttttgaa gatcaactat atcttcctgt gcattccgat ggaatttcag 3960 155 ttcatcagat gttcaccatg gccaccgcag aacaccgaag taattccagc atagcgggga 4020 157 agatgttgac caaggtggag aagaatcacg aaaaggagaa gtcacagcac ctagaaggca 4080 159 gegeeteete tteaetetee tetgattaga tgaaactgtt acettaeeet aaacacagta 4140 161 tttcttttta acttttttat ttgtaaacta ataaaggtaa tcacagccac caacattcca 4200 163 agctaccctg ggtacctttg tgcagtagaa gctagtgagc atgtgagcaa gcggtgtgca 4260 165 cacggagact catcgttata atttactatc tqccaaqaqt aqaaaqaaaq qctqqqqata 4320 167 tttgggttgg cttggttttg attttttgct tgtttgtttg ttttgtacta aaacagtatt 4380 169 atcttttgaa tatcgtaggg acataagtat atacatgtta tccaatcaag atggctagaa 4440 171 tggtgccttt ctgagtgtct aaaacttgac acccctggta aatctttcaa cacacttcca 4500 173 ctgcctgcgt aatgaagttt tgattcattt ttaaccactg gaatttttca atgccqtcat 4560 175 tttcagttag atgattttgc actttgagat taaaatgcca tgtctatttg attagtctta 4620 177 tttttttatt tttacaggct tatcagtctc actgttggct gtcattgtga caaagtcaaa 4680

Input Set : N:\RJAVED\10568142.txt
Output Set: N:\CRF4\02272006\J568142.raw

179	taaaccccca aggacga	acac acagtat	gga tcacatatt	g tttgacatta	agcttttgcc	4740
181	agaaaatgtt gcatgtg	gttt tacctcg	act tgctaaaat	c gattagcaga	aaggcatggc	4800
183	taataatgtt ggtggtg	gaaa ataaata	aat aagtaaacaa	a aatgaagatt	gcctgctctc	4860
185	tctgtgccta gcctcaa	aagc gttcatc	ata catcatacc	t ttaagattgc	tatattttgg	4920
187	gttattttct tgacage	gaga aaaagat	cta aagatcttt	attttcatct	tttttggttt	4980
189	tcttggcatg actaaga	aagc ttaaatg	ttg ataaaatat	g actagttttg	aatttacacc	5040
	aagaacttct caataa	_		_		5100
	agttaatttc ttaaca					5160
	tcttttaaag acatag					5220
197	ttgtgtatta ggtttt	taaa taccagc	taa aggattacci	cactgagtca	tcagtaccct	5280
199	cctattcagc tccccaa	agat gatgtgt	ttt tgcttaccc	aagagaggtt	ttcttcttat	5340
	ttttagataa ttcaag					5400
	ttttaaagaa aattta		_			5460
	tagactctgt acatate					5520
	gacagaacaa acatati	_				5580
	taggaagcat actctg			-		5640
	ttctggcttc aggaaag		-	_	_	5699
	<210> SEQ ID NO: 2			33 3		
	<211> LENGTH: 101					
217	<212> TYPE: DNA					
	<213> ORGANISM: Ho	omo sapiens				
	<400> SEQUENCE: 2	-				
221	ctcagaagct gtcaag	gata taagcag	tgc aacccaaga	ctaagaatct	tgatgttgga	60
	aataaagatg gaggaag					120
	taatcagccc cgtctca					180
	gaatgaaaac atctat					240
	ttacttgaag gatttag					300
	aacaaataag actcaa					360
	tgtgtcaatg gagatg					420
	aacacctcat ttgacct					480
	aagtccagag agtaaa					540
	tgaacactgg agaaaaa		_			600
	cgatttcagt ggcgat					660
	cattegeagg caceega					720
	agatcaacta tatctto					780
	ggccaccgca gaacac			_	_	840
	gaagaatcac gaaaag					900
	ctctgattag atgaaa					960
	tttgtaaact aataaag					1013
	<210> SEQ ID NO: 3					
	<211> LENGTH: 4279					
	<212> TYPE: DNA					
259	<213> ORGANISM: Ho	omo sapiens				
	<400> SEQUENCE: 3	£ -				
	gggccatttc tggacaa	acag ctgctat	ttt cacttgage	caagttaatt	tctcqqqqaa	60
	ttctcgggcg cgcacag					120
	cgccggcctc tccaate					180
	ggcagtcgag tgtttg					240
	attaacgtgt cattacg					300
•		J99 93~3~3°3°	5 5555566	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5-55-56	

Input Set : N:\RJAVED\10568142.txt
Output Set: N:\CRF4\02272006\J568142.raw

272 ttggctccct ccagctccta gagaggagaa gaagaaagcg gaaaagaggc agattcacgt 360 274 cgtttccagc caagtggacc tgatcgatgg ccctcctgaa tttatcacqa tatttgattt 420 480 276 attagegatg ccccctggtt tgtgtgttac gcacacacac gtgcacacaa ggctctggct 278 cgcttccctc cctcgtttcc agctcctggg cgaatcccac atctgtttca actctccgcc 540 280 gagggcgagc aggagcgaga gtgtgtcgaa tctgcgagtg aagagggacg agggaaaaga 600 282 aacaaagcca cagacgcaac ttgagactcc cgcatcccaa aagaagcacc agatcagcaa 660 284 aaaaagaaga tgggcccccc gagcctcgtg ctgtgcttgc tgtccgcaac tgtqttctcc 720 286 ctgctqggtq gaagctcggc cttcctgtcg caccaccgcc tgaaaqgcaq qtttcaqaqq 780 288 gaccgcagga acatccgccc caacatcatc ctggtgctga cggacgacca ggatgtggag 840 290 ctgggttcca tgcaggtgat gaacaagacc cggcgcatca tggagcaggg cggggcgcac 900 960 292 ttcatcaacg ccttcgtgac cacacccatg tgctgcccct cacgctcctc catcctcacc 294 ggcaagtacg tccacaacca caacacctac accaacaatg agaactgctc ctcgccctcc 1020 1080 296 tggcaggcac agcacgagag ccgcaccttt gccgtgtacc tcaatagcac tggctaccgg 298 acagetttet tegggaagta tettaatgaa tacaaegget eetaegtgee acceggetgg 1140 300 aaggagtggg teggaeteet taaaaaetee egettttata aetaeaeget gtgteggaae 1200 302 ggggtgaaag agaagcacgg ctccgactac tccaaggatt acctcacaga cctcatcacc 1260 304 aatgacagcg tgagcttctt ccgcacgtcc aagaagatgt acccgcacag gccagtcctc 1320 306 atggtcatca gccatgcagc ccccacggc cctgaggatt cagccccaca atattcacgc 1380 308 ctcttcccaa acgcatctca gcacatcacg ccgagctaca actacgcgcc caacceggac 1440 1500 310 aaacactgga tcatgcgcta cacggggccc atgaagccca tccacatgga attcaccaac 312 atgctccagc ggaagcgctt gcagaccctc atgtcggtgg acgactccat ggagacgatt 1560 314 tacaacatgc tggttgagac gggcgagctg gacaacacgt acatcgtata caccgccgac 1620 316 cacggttacc acatcggcca gtttggcctg gtgaaaggga aatccatgcc atatgagttt 1680 1740 318 gacatcaggg tecegtteta egtgagggge eccaaegtgg aageeggetg tetgaateee 1800 320 cacategice teaacatiga eetggeeece accateetgg acatigeagg eetggacata 1860 322 cctgcggata tggacgggaa atccatcctc aagctgctgg acacggagcg gccggtgaat 324 cggtttcact tgaaaaagaa gatgaqqqtc tqqcqqqact ccttcttqqt qqaqaqaqqc 1920 326 aagctgctac acaagagaga caatgacaag gtggacgccc aggaggagaa ctttctgccc 1980 328 aagtaccagc gtgtgaagga cctgtgtcag cgtgctgagt accagacqqc gtgtgagcag 2040 330 ctgggacaga aqtggcaqtg tqtqqaqqac qccacqqqqa aqctqaaqct qcataaqtgc 2100 2160 332 aagggcccca tgcggctggg cggcagcaga gccctctcca acctcgtgcc caagtactac 2220 334 gggcagggca gcgaggcctg cacctgtgac agcggggact acaagctcag cctggccgga 336 cgccggaaaa aactcttcaa gaagaagtac aaggccagct atgtccgcag tcgctccatc 2280 338 cgctcagtgg ccatcgaggt ggacggcagg gtgtaccacg taggcctggg tgatgccgcc 2340 340 cagccccgaa acctcaccaa gcggcactgg ccaggggccc ctgaggacca agatgacaag 2400 342 gatggtgggg acttcagtgg cactggaggc cttcccgact actcagccgc caaccccatt 2460 344 aaagtgacac atcggtgcta catcctagag aacgacacag tccagtgtga cctggacctg 2520 346 tacaagteee tgeaggeetg gaaagaceae aagetgeaea tegaceaega gattgaaaee 2580 348 ctgcagaaca aaattaagaa cctgagggaa gtccgaggtc acctgaagaa aaagcggcca 2640 2700 350 gaagaatgtg actgtcacaa aatcagctac cacacccagc acaaaggccg cctcaagcac 352 agaggeteca gtetgeatee ttteaggaag ggeetgeaag agaaggaeaa ggtgtggetg 2760 354 ttgcgggagc agaagcgcaa gaagaaactc cgcaagctgc tcaagcgcct gcagaacaac 2820 356 gacacgtgca gcatgccagg cctcacgtgc ttcacccacg acaaccagca ctggcagacg 2880 2940 358 gegeetttet ggacactggg geetttetgt geetgeacea gegeeaacaa taacacgtae 360 tggtgcatga ggaccatcaa tgagactcac aatttcctct tctgtgaatt tgcaactggc 3000 362 ttectagagt actitigatet caacacagac cectaccage tgatgaatge agtgaacaca 3060 364 ctggacaggg atgtcctcaa ccagctacac gtacagctca tggagctgag gagctgcaag 3120 366 qqttacaaqc aqtqtaaccc ccqqactcqa aacatqqacc tqqqacttaa aqatqqaqqa 3180 368 agctatgagc aatacaggca gtttcagcgt cgaaagtggc cagaaatgaa gagaccttct 3240

Input Set : N:\RJAVED\10568142.txt

Output Set: N:\CRF4\02272006\J568142.raw

```
370 tccaaatcac tgggacaact gtgggaaggc tgggaaggtt aagaaacaac agaggtggac
                                                                    3300
372 ctccaaaaac atagaggcat cacctgactg cacaggcaat gaaaaaccat gtgggtgatt
                                                                    3360
374 tccagcagac ctgtgctatt ggccaggagg cctgagaaag caagcacgca ctctcagtca
                                                                    3420
377 acatgacaga ttctggagga taaccagcag gagcagagat aacttcagga agtccatttt
                                                                    3480
379 tgcccctgct tttgctttgg attatacctc accagctgca caaaatgcat tttttcgtat
                                                                    3540
381 caaaaagtca ccactaaccc tcccccagaa gctcacaaag gaaaacggag agagcgagcg
                                                                    3600
383 agagagattt ccttggaaat ttctcccaag ggcgaaagtc attggaattt ttaaatcata
                                                                    3660
385 ggggaaaagc agtcctgttc taaatcctct tattcttttg gtttgtcaca aagaaggaac
                                                                    3720
387 taagaagcag gacagaggca acgtggagag gctgaaaaca gtgcagagac gtttgacaat
                                                                    3780
389 gagtcagtag cacaaaagag atgacattta cctagcatat aaaccctggt tgcctctgaa
                                                                    3840
391 gaaactgcct tcattgtata tatgtgacta tttacatgta atcaacatgg gaacttttag
                                                                    3900
393 gggaacctaa taagaaatcc caattttcag gagtggtggt gtcaataaac gctctgtggc
                                                                    3960
395 cagtgtaaaa gaaaaaaaaa aaaaattgtg gacatttctg ttcctgtcca gataccattt
                                                                    4020
397 ctcctagtat ttctttgtta tgtcccagaa ctgatgtttt ttttttaagg tactgaaaag
                                                                    4080
399 aaatgaagtt gatgtatgtc ccaagttttg atgaaactgt atttgtaaaa aaaattttgt
                                                                    4140
401 agtttaagta ttgtcataca gtgttcaaaa ccccagccaa tgaccagcag ttggtatgaa
                                                                    4200
4260
405 aaaaaaaaaa aaaaaaaaa
                                                                    4279
408 <210> SEQ ID NO: 4
409 <211> LENGTH: 4915
410 <212> TYPE: DNA
411 <213> ORGANISM: Homo sapiens
413 <400> SEQUENCE: 4
414 cacttgagcc gaagttaatt teteggggag ttetegggeg egeacaggca geteggtttg
                                                                      60
416 ccctgcgatt gagctgcggg tcgcggcctg cgccggcctc tccaatggca aatgtgtgtg
                                                                     120
                                                                     180
418 gctggaggcg agcgcgaggc tttcggcaaa ggcagtcgag tgtttgcaga ccggggcgag
420 teetgtgaaa geagataaaa gaaaacattt attaaegtgt cattaegagg ggagegeeeg
422 gccggggctg tcgcactccc cgcggaacat ttggctccct ccagctccga gagaggagaa
                                                                     300
424 gaagaaagcg gaaaagaggc agattcacgt cgtttccagc caagtggacc tgatcgatgg
                                                                     360
426 ccctcctgaa tttatcacga tatttgattt attagcgatg ccccctggtt tgtgttac
                                                                     420
428 gcacacaca gtgcacacaa ggctctggct cgcttccctc cctcgtttcc agctcctggg
                                                                     480
430 cgaatcccac atctgtttca actctccgcc gagggcgagc aggagcgaga gtgtgtcgag
                                                                     540
432 tgagtgtgcg tctgtgtgtc ccggcgaggg tgcgcgctcg gcgccgggag cgcggccagc
                                                                     600
434 cgagteegga ggeateggga ggtegagage egeegggaee eeagetetge gtteaetgee
                                                                     660
436 ccgtccggag ctggacttcg gggccggggc cggggccgtg cgccggggac aggcagggcc
                                                                     720
438 gggtcgcggg ccgcgcgtcc cccaggccgg agatctgcga gtgaagaggg acgagggaaa
                                                                     780
440 agaaacaaag ccacagacgc aacttgagac tcccgcatcc caaaagaagc accagatcag
                                                                     840
900
444 tecetgetgg gtggaagete ggeetteetg tegeaceaee geetgaaagg caggttteag
                                                                     960
                                                                    1020
446 agggacegca ggaacatecg ceceaacate ateetggtge tgaeggaega eeaggatgtg
1080
450 caetteatea aegeettegt gaccaeace atgtgetgee ceteaegete etceateete
                                                                    1140
452 actggcaagt acgtccacaa ccacaacac tacaccaaca atgagaactg ctcctcgccc
                                                                    1200
454 teetggeagg cacageacga gageegeace tttgeegtgt aceteaatag cactggetae
                                                                    1260
456 cggacagett tettegggaa gtatettaat gaatacaaeg geteetaegt gecaeeegge
                                                                    1320
458 tggaaggagt gggtcggact ccttaaaaac tcccgctttt ataactacac gctgtgtcgg
                                                                    1380
460 aacggggtga aagagaagca cggctccgac tactccaagg attacctcac agacctcatc
                                                                    1440
462 accaatqaca gcqtqaqctt cttccqcacq tccaaqaaqa tqtacccqca caqqccaqtc
                                                                    1500
464 ctcatggtca tcagccatgc agcccccac ggccctgagg attcagcccc acaatattca
                                                                    1560
```

VERIFICATION SUMMARY

DATE: 02/27/2006

PATENT APPLICATION: US/10/568,142

TIME: 14:50:28

Input Set : N:\RJAVED\10568142.txt

Output Set: N:\CRF4\02272006\J568142.raw

L:9 M:270 C: Current Application Number differs, Replaced Current Application No

L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date